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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/994,189 | 11/26/2001 | Mark Lindner | 010297 | 8110 |
| 23696 | 7590 | 12/22/2004 | EXAMINER | |
| Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714 | | | PHAN, HUY Q | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2687 | |

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 09/994,189 | Applicant(s) LINDNER ET AL. | |
| | Examiner Huy Q Phan | Art Unit 2687 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Amendment filed on 09/20/2004
Claims 1-22 are still pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Backstrom et al. (US-5,903,851).

Regarding claim 1, Backstrom et al. disclose a method for managing traffic channel (inherently to communication link, see col. 1, lines 40-60) to use in a wireless communication system (figs. 2 and 4), comprising:

establishing at least first (fig. 3, step 70 and col. 3, line 35-col. 4, line 48) and second communication connections (fig. 3, step 90; since the applicant has not defined

what the second communication connection is according to the first application; see col. 3, line 35-col. 4, line 48) in at least a first wireless communication device;

establishing respective first (fig. 3, step 80 and col. 3, lines 46-67) and second idle periods (fig. 3, step 80 after step 110; and col. 3, lines 46-67) for the first and second connections; and

releasing a traffic channel associated with the first and second connections when both idle periods expire (col. 4, lines 40-48 and fig. 3, steps 85 and 105 and col. 3, line 35-col. 4, line 48).

Regarding claim 2, Backstrom et al. disclose the method as recited in the rejection of claim 1, further comprising resetting an idle period when a transmission or reception passes through the respective connection (col. 3, lines 46-67).

Regarding claim 3, Backstrom et al. disclose the method as recited in the rejection of claim 1, wherein at least one idle period is set to a default value (col. 4, lines 40-48).

Regarding claim 4, Backstrom et al. disclose the method as recited in the rejection of claim 1, wherein at least one idle period is defined by the associated connection or application (col. 3, lines 46-67).

Regarding claim 5, Backstrom et al. disclose the method as recited in the

rejection of claim 1, wherein the first idle period is not equal to the second idle period (Backstrom et al. describe that the period of inactivity is indicated by the ARQ protocol frame, inherently for two different ARQ protocol frames may indicate unequal idle periods; see col. 3, lines 46-67).

Regarding claim 6, Backstrom et al. disclose the method as recited in the rejection of claim 1, wherein the connections are socket connections (fig. 2, lines 35-45 and fig. 4, lines 49-56).

Regarding claim 7, Backstrom et al. disclose a wireless communication system (fig. 2, lines 35-45 and fig. 4, lines 49-56), comprising:

- at least a first application running in a socket mode (fig. 4, step 190); and
- at least a second application running in a socket mode (fig. 4, step 190; since the applicant has not defined what the second application is and when the second application runs according to the first application), the applications potentially requiring use of a common wireless traffic channel (col. 1, lines 40-60), the traffic channel being selectively allowed to go dormant in the absence of transmissions over the traffic channel (col. 1, line 61-col. 2, line 11).

Regarding claim 8, Backstrom et al. disclose the method as recited in the rejection of claim 7, wherein the traffic channel is released when it goes dormant (col. 3, lines 46-67).

Regarding claim 9, Backstrom et al. disclose the method as recited in the rejection of claim 7, wherein each socket mode is associated with a respective idle period (indicated by the ARQ protocol frame; see col. 3, lines 46-67), and the traffic channel goes dormant upon the expiration of at least one idle period (col. 3, lines 60-67).

Regarding claim 10, Backstrom et al. disclose the method as recited in the rejection of claim 9, wherein the traffic channel goes dormant upon the expiration of both idle periods (col. 4, lines 40-48).

Regarding claim 11, Backstrom et al. disclose the method as recited in the rejection of claim 10, wherein an idle period is reset when a transmission or reception passes through the respective socket (indicated by the ARQ protocol frame; see col. 3, lines 46-67).

Regarding claim 12, Backstrom et al. disclose the method as recited in the rejection of claim 11, wherein at least one idle period is set to a default value (col. 4, lines 40-48).

Regarding claim 13, Backstrom et al. disclose the method as recited in the rejection of claim 11, wherein at least one idle period is defined by the associated

application (col. 3, lines 52-57 and col. 4, lines 45-48).

Regarding claim 14, Backstrom et al. disclose the method as recited in the rejection of claim 11, wherein the idle periods are not equal to each other (Backstrom et al. describe that the period of inactivity is indicated by the ARQ protocol frame, inherently for two different ARQ protocol frames may indicate unequal idle periods; see col. 3, lines 46-67).

Regarding claim 15, Backstrom et al. disclose the method as recited in the rejection of claim 7, wherein the applications run on a wireless communication device (col. 3, lines 16-34).

Regarding claim 16, Backstrom et al. disclose a computer program product (fig. 2, step 82 and see col. 3, lines 52-57), comprising:

means for associating at least a first idle period with a first connection (fig. 3, steps 70-80 and col. 3, line 35-col. 4, line 48);

means for associating at least a second idle period with a second connection (fig. 3, steps 70-80 after step 110 and col. 3, line 35-col. 4, line 48), a wireless traffic channel being establishable to both connections (col. 1, lines 40-60); and

means for releasing the traffic channel when the idle periods expire (fig. 3, step 85 and col. 3, line 35-col. 4, line 48).

Regarding claim 17, Backstrom et al. disclose the computer program product as recited in the rejection of claim 16, wherein the connections are socket connections or packet connections (fig. 4, step 190, col. 5, lines 8-18).

Regarding claim 18, Backstrom et al. disclose the computer program product as recited in the rejection of claim 17, further comprising means for resetting an idle period when a transmission or reception passes through the respective socket (indicated by the ARQ protocol frame; see col. 3, lines 46-67).

Regarding claim 19, Backstrom et al. disclose the computer program product as recited in the rejection of claim 18, comprising means for setting at least one idle period to a default value (col. 4, lines 40-48).

Regarding claim 20, Backstrom et al. disclose the computer program product as recited in the rejection of claim 18, wherein the first idle period is not equal to the second idle period (Backstrom et al. describe that the period of inactivity is indicated by the ARQ protocol frame, inherently for two different ARQ protocol frames may indicate unequal idle periods; see col. 3, lines 46-67).

Regarding claim 22, Backstrom et al. disclose a method for managing a traffic channel (see figs. 2 and 4; inherently to communication link; and see col. 1, lines 40-60) associated with a wireless communication device and plural connections selected from

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the group of connections including socket connections (inherently to data communications connection; fig. 4, step 190 and see col. 4-line 49-col. 5, line 18) and packet connections (inherently to data communications connection; fig. 4, step 150 and see col. 5, lines 1-10), the method including: enabling a traffic channel associated with plural applications to be released only when all applications associated with the traffic channel do not require the traffic channel (inherently to connection is disconnected if no traffic has been exchanged; see col. 4, lines 40-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backstrom et al. in view of Motoyoshi (US-6,801,785).

Regarding claim 21, Backstrom et al. disclose the computer program product as recited in the rejection of claim 16. But, Backstrom et al. do not particularly show wherein the traffic channel is a CDMA traffic channel. However in analogous art, Motoyoshi teaches wherein the traffic channel is a CDMA traffic channel (col. 2, lines 18-50). Since, Backstrom et al. and Motoyoshi are related to the method of dormancy in the mobile station; therefore, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify the system of Backstrom et al. for purpose of offering CDMA technology for the method of dormancy in the mobile station.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Voyer et al. (US-4,469,995) disclose a mobile radio communication system.
- b) Balachandran et al. (US-5,832,384) disclose a method of idle channel in communication network.
- c) Nara et al. (US-6,747,965) disclose idle traffic channel in CDMA mobile communication system.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G Lester can be reached on 703-306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SONNY TRINH
PRIMARY EXAMINER

Examiner: Phan, Huy Q.

AU: 2687

Date: Dec. 20, 2004